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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,660	12/10/2001	Chiyoaki Iijima	111350	2201
25944	7590	10/30/2003		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER LANDAU, MATTHEW C	
			ART UNIT 2815	PAPER NUMBER

DATE MAILED: 10/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/006,660

Applicant(s)

IJIMA, CHIYOAKI

Examiner

Matthew Landau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

In light of the amendment filed August 14, 2003, claims 10, 18, and 20 now read on the elected species and will be treated accordingly. However, claims 9 and 11-17 remain withdrawn from consideration.

This application contains claims 9 and 11-17 drawn to an invention nonelected with traverse in Paper No. 12. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

Claims 1, 2 and 18 are objected to because of the following informalities:

In regards to claims 1 and 18, the limitation “the transmissive portion being formed such that...” is unclear. It is suggested Applicant change the claim as follows (or manner similar thereto): “the transmissive portion being formed such that [a first dimension of] a transmissive area, corresponding to the transmissive portion of at least one sub-pixel out of the plurality of sub-pixels, has a first dimension and [a second dimension of] a transmissive area, corresponding to the transmissive portion at another sub-pixel, has a second dimension, the first and second...”.

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation “the dimension of the transmissive area at each sub-

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pixel being a dimension chosen according to spectral properties of the illumination light” does not appear to further limit the device claimed in amended claim 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regards to claim 8, the limitation “the opening portion comprising opening parts wherein a degree of separation between the opening parts corresponds to the dimension of the transmissive area at the sub-pixels” renders the claim indefinite. Does Applicant intend to claim the degree of separation between the opening parts increase as the transmissive area increase? In a claim drawn to a product, how does this further structurally limit the claimed invention?

In regards to claim 18, the limitation “and pigment layers of each color are formed over an entirety of an area overlapping the transmissive area...” renders the claim indefinite. Does Applicant intended to claim more than one pigment layer (ie, more than one color) formed over a single transmissive area?

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyashita et al. (US Pat. 6,124,909, hereinafter Miyashita).

In regards to claim 1, Figures 26 and 27 of Miyashita disclose a liquid crystal display panel formed of liquid crystals LC sandwiched between a pair of opposing substrates (1 and 2), and including pixels having a plurality of sub-pixels each corresponding to different colors; an illumination device (column 30, lines 15-20) provided to an opposite side of the liquid crystal display panel in relation to an observation side that illuminates the liquid crystal display panel with illumination light; a transfective layer 3b disposed on the opposite side of the liquid crystals in relation to the observation side with a transmissive portion 3a that transmits the illumination light formed thereto, the transmissive portion being formed such that a first dimension of a transmissive area corresponding to the transmissive portion of at least one sub-pixel out of the plurality of sub-pixels and a second dimension of a transmissive area corresponding to the transmissive portion at another sub-pixel, differ; and a color filter (15R/15G/15B) provided corresponding to each of the sub-pixels that transmits light of a wavelength corresponding to a color of each sub-pixel. Miyashita discloses the area of the reflecting film 3b in each sub-pixel is the same as the area of the non-colored portion b of the color filter (column 30, lines 25-27). Therefore, the transmissive portion of the transfective layer

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has the same area as the colored portion of the color filter for each sub-pixel. Since Figure 26 shows the colored portion of 15G is different than 15R, the transmissive area corresponding to 15G must be different from the transmissive area corresponding to 15R. The product-by-process limitation “according to the spectral properties of the illumination light” does not patentably distinguish the claimed invention over the prior art. See MPEP 2113.

In regards to claim 2, the product-by-process limitation “the dimension of the transmissive area at each sub-pixel being a dimension chosen according to spectral properties of the illumination light”, does not patentably distinguish the claimed invention over the prior art. See MPEP 2113.

In regards to claim 3, the product-by-process limitation “the dimension of the transmissive area at each sub-pixel being a dimension chosen according to the luminance of a wavelength of the illumination light corresponding to a color of the sub-pixel” does not patentably distinguish the claimed invention over the prior art.

In regards to claim 4, Miyashita discloses the dimension of the transmissive area at a sub-pixel of a color corresponding to a wavelength of the illumination light with great luminance (green) being smaller than the dimension of the transmissive area at a sub-pixel of a color corresponding to a wavelength of the illumination light with small luminance (red) (column 13, lines 40-45).

In regards to claim 5, Miyashita discloses the dimension of the transmissive area at each of sub-pixels differs for each sub-pixel corresponding to a different color (column 13, lines 40-45).

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In regards to claim 6, Miyashita discloses the dimension of the transmissive area at each of the sub-pixels differing according to a position of the sub-pixel within a substrate face of the liquid crystal display panel (column 29, lines 50-56).

In regards to claim 7, Figure 27 of Miyashita discloses the transmissive portion 3a being an opening portion formed in the transfective layer corresponding to each of the subpixels.

In regards to claim 8, as best the examiner can ascertain the claimed invention, Figures 26 and 27 of Miyashita disclose the opening portion comprising opening parts wherein a degree of separation between the opening parts corresponds to the dimension of the transmissive area at the sub-pixels.

In regards to claim 10, Figures 26 and 27 of Miyashita discloses a transfective LCD comprising: a liquid crystal layer sandwiched between an upper substrate 1 and a lower substrate 2 opposing one another; a transfective layer 3b which has a transmissive area 3a that transmits light and a reflective area b that reflects incident light from an upper substrate side, and which is disposed on an inner side of the lower substrate; a color filter (15R/15G/15B) disposed on an upper side of the transfective layer, upon which a plurality of pigment layers (15R/15G/15B) with different colors according to each of sub-pixels forming display area are arrayed; and an illumination device (column 30, lines 15-20) disposed on an outer side of the lower substrate, the pigment layers being formed over an entirety of an area overlapping the transmissive area in a planar manner and an area overlapping the reflective area in a planar manner. Note that Miyashita discloses the reflective film 3b has a wider area than the non-colored light exit area (column 30, lines 25-28). Therefore, the pigment layers overlap the reflective area. Figures 26 and 27 of Miyashita disclose at least one color pigment layer not being formed at a part of an

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area overlapping the reflective area in a planar manner (all pigment layers don't overlap at least a portion of reflective area b), and a dimension of a pigment layer formation area, where the pigment layers are formed, being formed so as to be different between at least one color pigment layer 15R out of the plurality of pigment layers of differing colors and another color pigment layer 15G (column 4, lines 23-37 and column 13, lines 40-45).

In regards to claims 19 and 20, it is inherent for a liquid crystal display to be used in some type of electronic apparatus, since a liquid crystal display requires electricity for operation.

Allowable Subject Matter

Claim 18 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Response to Arguments

Applicant's arguments filed August 13, 2003 have been fully considered but they are not persuasive.

In response to Applicant's argument that "Miyashita does not disclose or suggest a transmissive portion of a transfective layer, in addition to a color filter, wherein a first and a second dimension of the transmissive portion differ 'according to the spectral properties of illumination light'", as stated in the rejection above, Miyashita discloses the transmissive area corresponds to the area colored portion of the color filter. Figure 26 clearly shows the area of the

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colored portion of the color filter differs (see also column 4, lines 23-37 and column 13, lines 40-45). The limitation “differing according to the spectral properties of the illumination light”, is merely a recitation of the considerations taken when selecting the first and second dimension. These considerations are part of the process of making the final product. Since the claimed invention is a final product, such considerations do not further structurally limit the claimed invention. In other words, the aforementioned limitation is a product-by-process limitation. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. “The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). In this case, the product disclosed by Miyashita is the same as the claimed product, therefore the claim is fully anticipated by Miyashita.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Landau whose telephone number is (703) 305-4396.

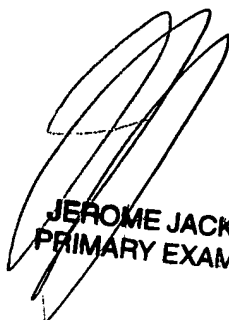
The examiner can normally be reached from 8:30 AM - 5:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on (703) 308-2772. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Matthew C. Landau

Examiner

October 24, 2003



**JEROME JACKSON
PRIMARY EXAMINER**